

and articles of manufacture consistent with the present invention may contain additional or different components.

One skilled in the art will appreciate that methods, systems, and articles of manufacture consistent with the present invention may also be implemented in a client-server environment, like the one depicted in Fig. 3. Fig. 3 depicts a block diagram of a client-server based data processing system 300 with which methods, systems, and articles of manufacture consistent with the present invention may be implemented. A client computer system 310 and a server computer system 320 are each connected to a network 330, such as a Local Area Network, Wide Area Network, or the Internet. The resource program 180 can be stored on the client computer system 310 while some or all steps of the processing as described below can be carried out on the server computer system 420, which is accessed by the client computer system 310 over the network 330.

Referring back to Fig. 1, the resource program 180 and the components 181, 182, and 183 need not be implemented as a single program or as separate programs or processes. Rather, the resource program 180 and the components 181, 182, and 183 may be combined into one or more programs or processes, an object-oriented class, or divided functionally in other ways. The illustrated implementation depicts the resource program 180 and the components 181, 182, and 183 as software, but the present implementation may be implemented as a combination of hardware and software or hardware alone.

As will be described in more detail below, resource program 180 provides resources, such as text information, to a user depending on how the user parameter defines the user's environment, such as having a selected language or presentation format. An application, for example for providing web pages to a user, may thus be written independently of the user parameter. When the application is executed, the application component 182 presents information to the user that corresponds to the user parameter. For example, the information is presented in a particular language or format that is understood by the user.

The resource program may receive requests, such as entries of user parameters, from a plurality of users, wherein the users have different nationalities, locations, or languages.

As noted above, the resource program contains the user parameter component 181 that sets at least one user parameter for selecting a user environment for the users. The user parameter may be associated with, for example, a selected language or a user location. For example, the user parameter component 181 may set the user parameter in accordance with a telephone country code used by a user for accessing the resource program. In this example, the user parameter can be set, for example, to "49" for Germany or "01" for the United States of America. Based on the setting of the user parameter, various settings of the user environment can be made. For example, in a case where the user parameter is set to indicate a location of the user in the United States of America, a preferred language of the user may be set to English. Further, information can be displayed in a particular format that corresponds to the United States of America, such as date information can be displayed in a format that corresponds to a format used in the United States of America.

The user parameter component 181 may receive requests from the plurality of users to set a user parameter for each user. This may be accomplished either by the user parameter component 181 requesting a user to select a user parameter or by the user parameter component 181 receiving a selected user parameter from a user. When the user parameter component 181 receives a user parameter from a user, the user parameter can be communicated via, for example, a URL associated with the user parameter component 181. A user parameter for a particular user may be set once upon starting a communication session between the resource program and the user or may be set each time the user transmits a request to the resource program.

As an example, the user parameter component 181 could request the user to select one of a plurality of presented languages for setting the user parameter. For example, the user parameter component 181 could present, on the video display 150, a list of available languages, such as, English, German, Spanish, French and Italian and could request the user to select one of these languages as the preferred language. Also, the user parameter component 181 could present a list of available countries or regions, such as, Germany, Spain, or North America, and could request the user to select one of these countries or regions as the

location of the user. Based on input received from the user, the user parameter component 181 would set one or more user parameters.

The resource program may store the user parameters in association with user identifiers, for example as an object, in the memory 130, where they are accessible by the user parameter component 181. Further, the resource program may store the user parameters in a session object or application object. A session object is an object that persists for the duration of a user-session with an application. Information, such as the user parameters, that is stored in a session object is available for the duration of a user-session. An application object is an object that persists for the duration of the execution of an application. Information, such as the user parameter, that is stored in an application object can be shared among all users of the application.

Each user identifier is associated with a user. Thus, the user parameter component 181 can store a list of user identifiers along with user parameters that set, for example, a language corresponding to each user identifier. In a case where no language is selected or the selected language is not available, the user parameter component 181 could set the respective user parameter to a default language. In a case where a request for an execution of an application is received at the resource program from a particular user, the resource program, in a lookup operation, determines the preferred language for that user and resources may be provided to the user in the selected language. The lookup operation will be described in more detail below.

The resource program further includes application component 182 for executing an application program independent of a user environment, that is independent of a user parameter. For example, the application component 182 can execute an application program for generating a web page to be displayed on the video display 150 for the user. The generating of the web page could involve generating frames for display, including graphic elements and text elements. The application component 182 can also independently execute application programs for a plurality of users, in which case, each user could control the execution of a respective application program via user requests received by the application component 182.